Annual Presentation
to
IMI Systems

August 1, 1994

INPUT®

Annual Presentation to IMI Systems

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President
INPUT

Presentation Agenda

- Information Services Market
- Professional Services/SI:
  Near and Long-Term Assessment
- Prime Vendor Selection Criteria
- User Buying Patterns
- Outsourcing/ISSC Assessment
- "New Technology" Software Company
  Opportunities

IMI-1

Notes:

U.S. Information Services Industry, 1994-1999

Market Size ($ Billions) — 1994: 152, 1999: 271, CAGR 12%
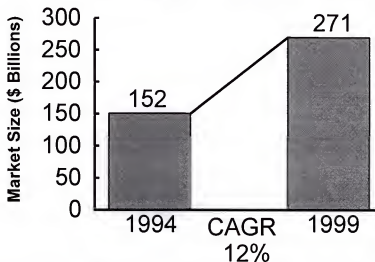
IMI-2

Notes:

Hot Industries in 1999

Industry	1999		IMI Expertise
	Size ($ B)	Ranking	
Discrete mfg.	32.6	1	X
Banking/finance	28.3	2	X
Federal gov't.	16.8	3	
Process mfg.	16.4	4	X
State/local gov't.	15.2	5	X
Telecommunications	11.2	6	X

IMI-3

Notes:

Top Five-Year Growth Rates
1994-1999

| Industry | 1994-1999 | | IMI Expertise |
	CAGR (%)	Ranking	
Telecommunications	19	1	X
Retail distribution	16	2	
Process mfg.	15	3	X
Discrete mfg.	15	3	X
State and local gov't.	14	5	X

IMI-4

Notes:

IMI Market Size, 1994-1999
Professional Services

Industry	1994 ($ M)	1999 ($ M)
Banking	2,885	4,333
Discrete Mfg.	5,580	7,869
Process Mfg.	2,936	5,856
State and Local	2,324	5,572
Telecomm.	1,519	4,021
Overall Market	22,090	37,994

IMI-5

Notes:
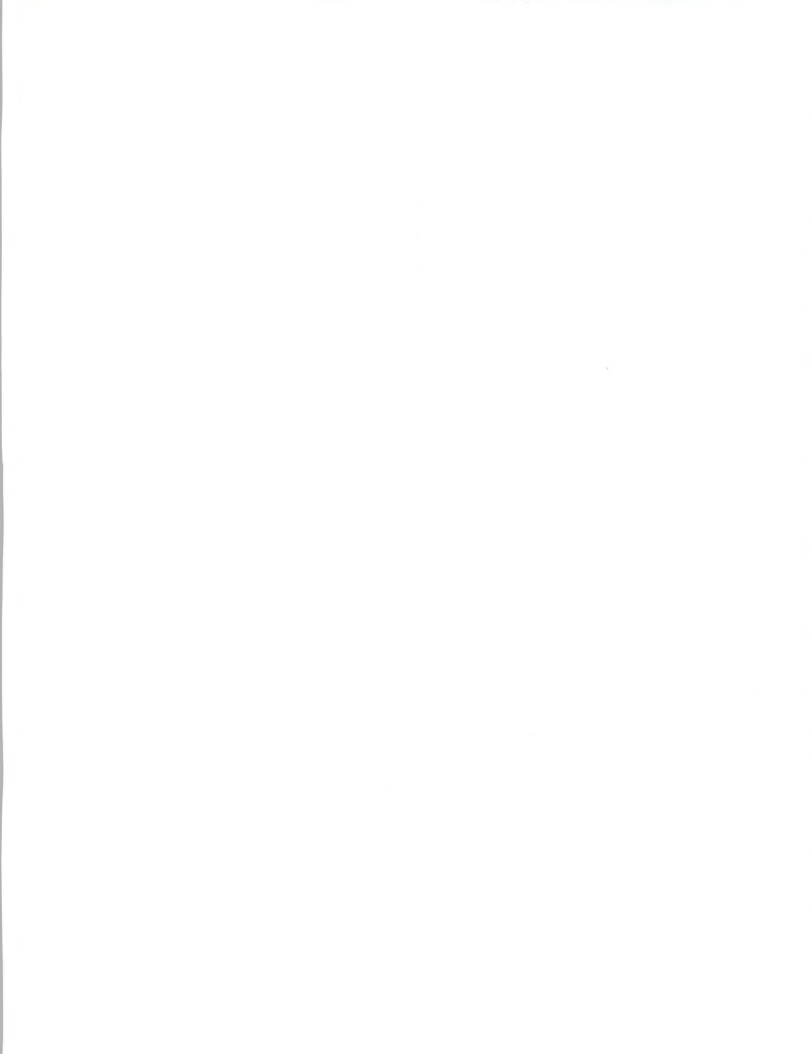
7/94

IMI Market Size, 1994-1999
Systems Integration

Industry	1994 ($ M)	1999 ($ M)
Banking	689	1,786
Discrete Mfg.	1,948	4,977
Process Mfg.	505	1,019
State and Local	1,161	2,047
Telecomm.	364	1,086
Overall Market	11,184	22,673

IMI-6

Notes:

IMI Market Growth, 1994-1999

Industry	PS (%)	SI (%)
Banking	8	21
Discrete Mfg.	7	21
Process Mfg.	15	15
State and Local	19	12
Telecomm.	21	24
Overall Market	11	15

IMI-7

Notes:

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Service Market Opportunity

Service	Market Size	Est. Market Growth (%)
Management Consultancy	Small	+20
Project Services	Medium	10-15
Staff Augmentation	Large	5-10

Notes:

Current PS Environment

- Increase in management consultancy
- Increased technical complexity
- Re-positioning of companies
- Move to SI to maintain margins

IMI-9
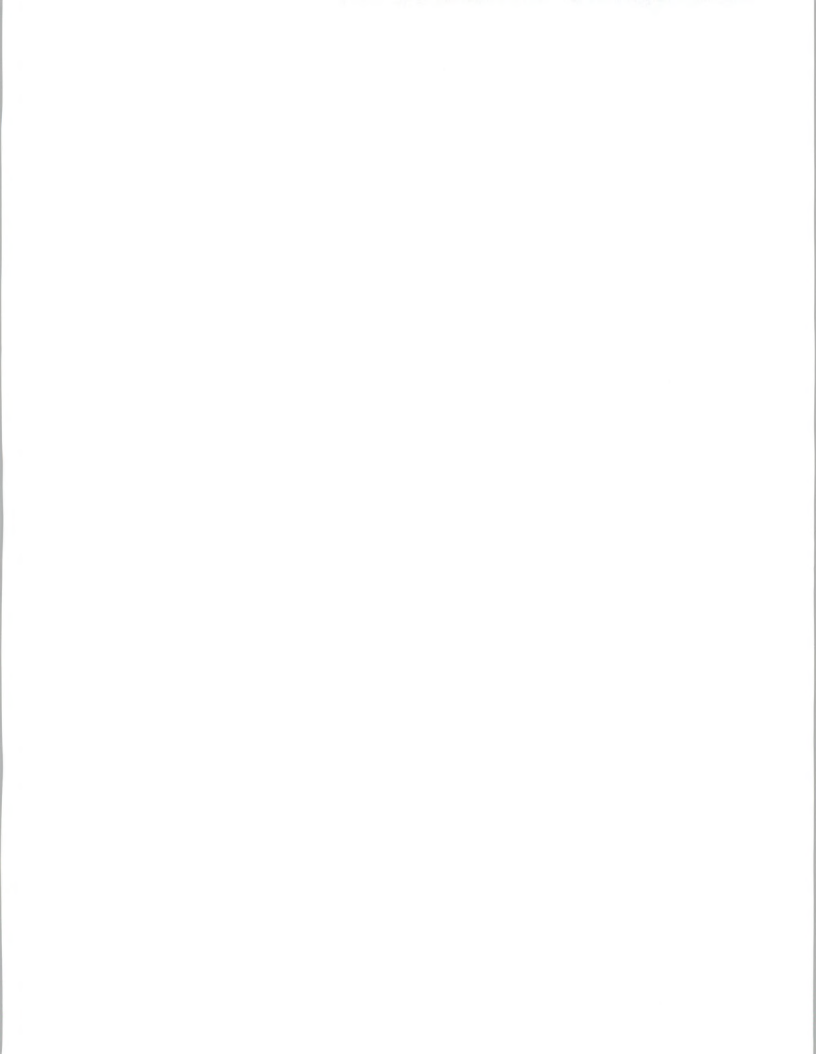
Notes:

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Changes in Application Software Services

1990-94: Focus within application

1995-99: Focus on interaction between applications
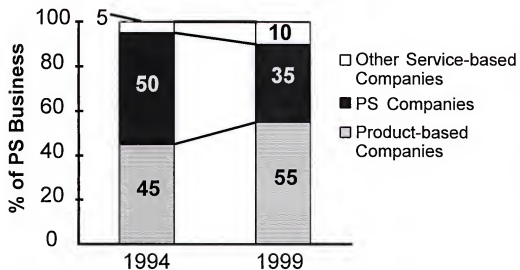
Notes:

New Competition

- Computer companies ~ 40% of SI market
- Management consultancies
- Telecommunication vendors

IMI-11

Notes:

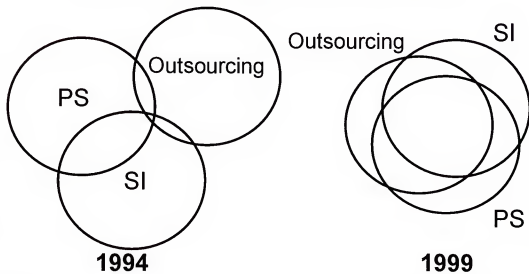# Makeup of PS Market

IMI-12

Notes:

Moving into Consultancy

Positive/Optimism ◄── Neutral ──► Negative/Caution

High Reward	High Risk
Competitive Advantage	Customer Perception
Customer Partnership	Increased Skill Req.

Vendor

IMI-13

Notes:

1994-1999 Service Market

IMI-14

Notes:

Professional Services in 1999

1. Three catagories of vendor:
    - Independent full-service companies
    - Virtual companies
    - Niche-market specialists

2. Management consultancies are prime contractors

3. Development Service margins   < 8%

Notes:

Criteria for SI Vendor Selection

Selection Criteria	Importance*
Experience with similar systems	4.3
Proposal and discussions with vendors	4.2
Image of vendor as agent of change	4.1
Experience with industry and application	4.1
Pricing	4.1
Guarantees, penalties	4.1
Ability to work with functional users	4.0

*Rating: 1 = Low, 5 = High

IMI-16

Notes:

Selection Criteria for BPR Vendors
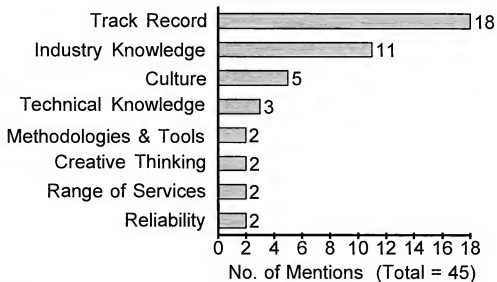
Criteria	No. of Mentions
Track Record	18
Industry Knowledge	11
Culture	5
Technical Knowledge	3
Methodologies & Tools	2
Creative Thinking	2
Range of Services	2
Reliability	2

No. of Mentions (Total = 45)

IMI-17

Notes:

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C/S Prime Vendor
Considerations

- Server Equipment
  - Business issue* - Replacement cost
  - Technology issue - Capacity

- Server Operating System
  - Business issue* - Training cost
  - Technology issue - Multiprocessing capability

  * Indicates issue taking precedence in selection process

IMI-18

Notes:

C/S Prime Vendor Considerations

- Client Operating System
  - Business issue* - Investment in base
  - Technology issue - Capacity

- Network Operating System
  - Business issue* - Investment in base (Netware)
  - Technology issue - NT integration

  * Indicates issue taking precedence in selection process

IMI-19

Notes:

C/S Prime Vendor Considerations

- DB Management Software
  - Business issue - Cost of change
  - Technology issue* -Interface and portability
- Application Development Tools
  - Business issue - Investment and cost
  - Technology issue* - New tools

  * Indicates issue taking precedence in selection process

IMI-20

Notes:

Influence of IT Decision Makers 1983-1998

Function	Level of Influence		
	1983	1993	1998
Individual User	Low	Medium	Medium
Functional Mid-Mgt.	Low	Medium	High
Funct. Exec.	Medium	High	High
IS Mid. Mgt.	High	Low	Low
CIO	High	Medium	Low
CEO/COO	High	High	High

IMI-21

Notes:

PS Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

← Direction of PS Opportunity
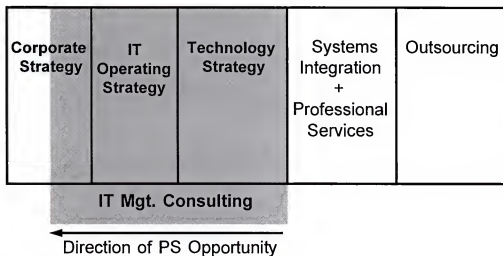
IMI-22

Notes:

SI Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

Direction of SI Opportunity
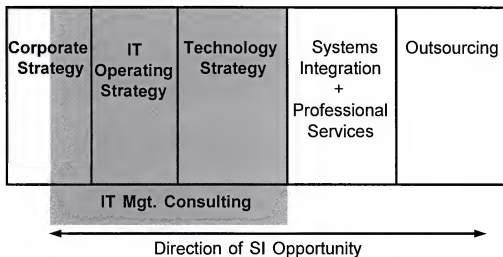
IMI-23

Notes:

Outsourcing Service Categories
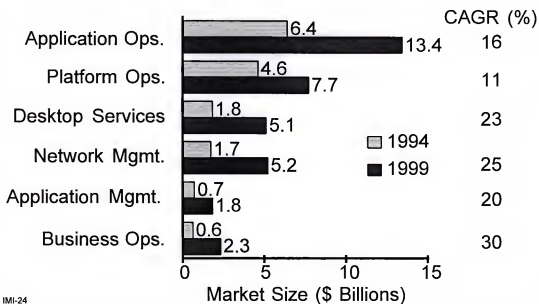
Outsourcing

IS Outsourcing — Bus. Oper. Outsourcing

Sys. Ops. | Desktop | Net. Mgmt. | Appl. Mgmt.

Platform Operations

Application Operations

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SK-1

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Notes

Outsourcing Market, 1994-1999

	1994	1999	CAGR (%)
Application Ops.	6.4	13.4	16
Platform Ops.	4.6	7.7	11
Desktop Services	1.8	5.1	23
Network Mgmt.	1.7	5.2	25
Application Mgmt.	0.7	1.8	20
Business Ops.	0.6	2.3	30

Market Size ($ Billions)

IMI-24

Notes:

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ISSC–Current

Strengths	Weaknesses
Data Center outsourcing	IBM bias
Size	Corporate confusion
Advantis alliance	Solution selling
Market awareness	Client/Server

IMI-25

Notes:

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ISSC–Future (1998+)

Strengths	Weaknesses
IS solutions	Business process solutions
Technology	IBM bias
IT resources	Profitability
Market awareness	Sales strategy

IMI-26

Notes:

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ISSC Positioning

Business

Knowledge

Technology

IS Utility   Service   IS Solution

1998 Projected Position

1994 Marketing Message

1994 Actual Position

Notes:

Major Software Suppliers/Partners

Worldwide IS Revenues ($ M)

- Microsoft: 4,100 (1993), 3,300 (1992)
- Informix: 350 (1993), 280 (1992)
- HP: 1,500 (1993), 1,200 (1992)
- Sybase: 430 (1993), 270 (1992)
- Forté*

Legend: ☐ 1993 ■ 1992
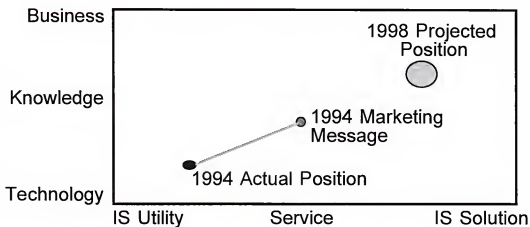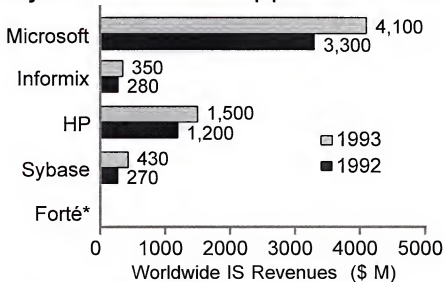
IMI-28

*Emerging software supplier. Revenues not yet available

Notes:

IMI Fit With Partner Strengths

	IMI Benefit	Partner
Microsoft	Future platforms	Databases, tools
Informix	Vertical leads	VAR program
HP	Object platforms	Large accounts
Sybase	Mainframe access	VAR program
Forté	Rapid deployment	Technology

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Notes:

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- **Client/Server Applications and Directions**
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- 5-year market forecasts
- Competitive analysis
- Access to experienced consultants
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- Annual conference

DATABASES

- **Software and Services Market Forecasts**
- **Software and Services Vendors**
- **U.S. Federal Government**
  - Procurement Plans (PAR)
  - Forecasts
  - Awards (FAIT)
- **Commercial Application (LEADS)**

CUSTOM PROJECTS

For Vendors—analyze:

- **Market strategies and tactics**
- **Product/service opportunities**
- **Customer satisfaction levels**
- **Competitive positioning**
- **Acquisition targets**

For Buyers—evaluate:

- **Specific vendor capabilities**
- **Outsourcing options**
- **Systems plans**
- **Peer position**

OTHER SERVICES

Acquisition/partnership searches

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Presentation Agenda

- Information Services Market
- Professional Services/SI:
  Near and Long-Term Assessment
- Prime Vendor Selection Criteria
- User Buying Patterns
- Outsourcing/ISSC Assessment
- "New Technology" Software Company
  Opportunities

IMI-1

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Notes:

NOTES VERSION

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U.S. Information Services Industry, 1994-1999
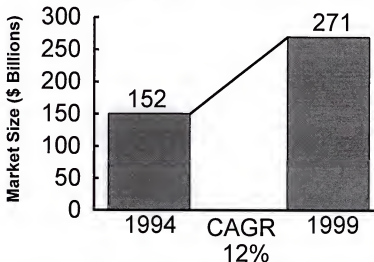
IMI-2

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Notes:

The overall 1994 information services industry will grow 1% more than was forecast in 1993.

U.S. economy is gaining strength with 1994 inflations estimated at a low 2.3%

1994 before-tax corporate profits will be at 10%+

IS long-range growth is unchanged at 12%, reflecting a stabilization of overall user expenditures resulting from the organization/structural changes of the last 2-3 years.
- Downsizing   - Acquisitions   - Networking
- Outsouricng   - Global awareness - Client/server

Growth will be driven by:
- Growing need for telecom resources (Internet)
- Critical skill requirements (technology, applications, SI)
- Willingness to outsource IT functions
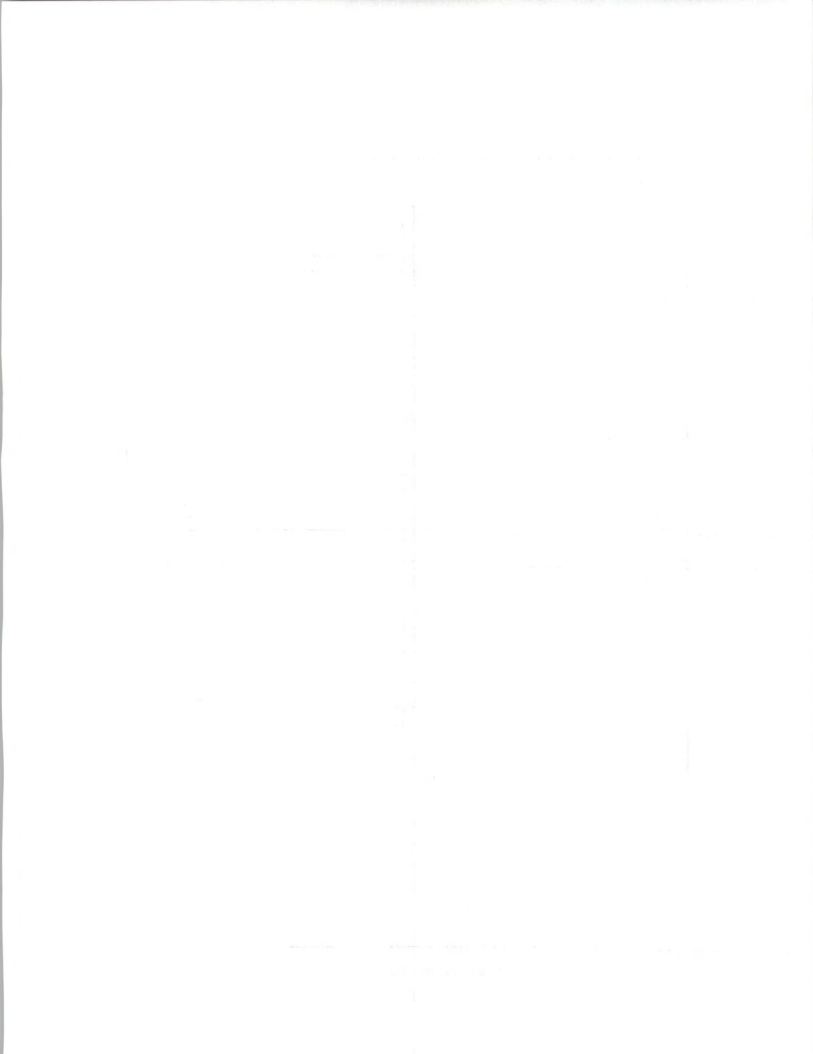
7/94

Hot Industries in 1999

Industry	1999 Size ($ B)	1999 Ranking	IMI Expertise
Discrete mfg.	32.6	1	X
Banking/finance	28.3	2	X
Federal gov't.	16.8	3	
Process mfg.	16.4	4	X
State/local gov't.	15.2	5	X
Telecommunications	11.2	6	X

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Notes:

Total information services expenditures. Ranked in order of size. IMI expertise means that IMI sells to these industries

IMI serves 5 of the top 6 industries followed by INPUT (In terms of total information services expenditures in 1999). PS, SI and outsourcing IS expenditures will be detailed later.

Together, these five industries represent 38% of the 1999 information services market. ($103.7 billion of $270.7 billion)

Top Five-Year Growth Rates 1994-1999

Industry	1994-1999		IMI Expertise
	CAGR (%)	Ranking	
Telecommunications	19	1	X
Retail distribution	16	2	
Process mfg.	15	3	X
Discrete mfg.	15	3	X
State and local gov't.	14	5	X

IMI-4

INPUT

Notes:

IMI also serves 4 of the top 5 growth industries for information services, as measured by 1995-1999 CAGRs.

Ranked in order of 5-year growth rates for total information services expenditures. (Process and discrete mfg. tied for 3rd place). IMI expertise = IMI sells to these industries.

The message here is that from a market size and growth rate perspective, IMI is well positioned.

IMI Market Size, 1994-1999
Professional Services

Industry	1994 ($ M)	1999 ($ M)
Banking	2,885	4,333
Discrete Mfg.	5,580	7,869
Process Mfg.	2,936	5,856
State and Local	2,324	5,572
Telecomm.	1,519	4,021
Overall Market	22,090	37,994

IMI-5

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Notes:

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IMI Market Size, 1994-1999
Systems Integration

Industry	1994 ($ M)	1999 ($ M)
Banking	689	1,786
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Process Mfg.	505	1,019
State and Local	1,161	2,047
Telecomm.	364	1,086
Overall Market	11,184	22,673

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Notes:

IMI Market Growth, 1994-1999

Industry	PS (%)	SI (%)
Banking	8	21
Discrete Mfg.	7	21
Process Mfg.	15	15
State and Local	19	12
Telecomm.	21	24
Overall Market	11	15

Notes:

Industry	Professional Services				Systems Integration		
	1994 ($M)	1999 ($M)	CAGR (%)		1994 ($M)	1999 ($M)	CAGR (%)
Banking	2885	4333	8		689	1786	21
Discrete Manufacturing	5580	7869	7		1948	4977	21
Process Manufacturing	2936	5856	15		505	1019	15
State & Local Gov.	2324	5572	19		1161	2047	12
Telecommunications	1519	4021	21		364	1086	24
Overall	22090	37994	11		11184	22673	15

This provides an indication of how to position the company in each of the markets.

It should be remembered that the relatively small size of the Banking Process Manufacturing and Telecomm. SI markets distort the figures for growth.

Discrete: SI driven by consolidation of traditional islands of automation. S & LOC: Tends to control projects from within, therefore SI lower than PS.

Service Market Opportunity

Service	Market Size	Est. Market Growth (%)
Management Consultancy	Small	+20
Project Services	Medium	10-15
Staff Augmentation	Large	5-10

IMI-8

Notes:

Although not broken down to vertical market level, these estimates of relative growth in each of the service areas will help identify the optimum service mix.

The margins in each of the service areas are coincidentally equivalent to the growth figures.

7/94

Current PS Environment

- Increase in management consultancy
- Increased technical complexity
- Re-positioning of companies
- Move to SI to maintain margins

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Notes:

The increase in technical complexity has impact on not just skills but also on project risk. Recent research on risk management indicated that vendors view technical complexity as the number 1 risk factor yet this was not identified as a factor by users.

This enhanced complexity generates additional demand for external assistance.

In an attempt to maintain, or raise, margins many PS companies are moving into SI. Average margins for SI are in the 15-20% range but only 10-15% for PS. Management consultancy demands the top margins with 20-25% average.
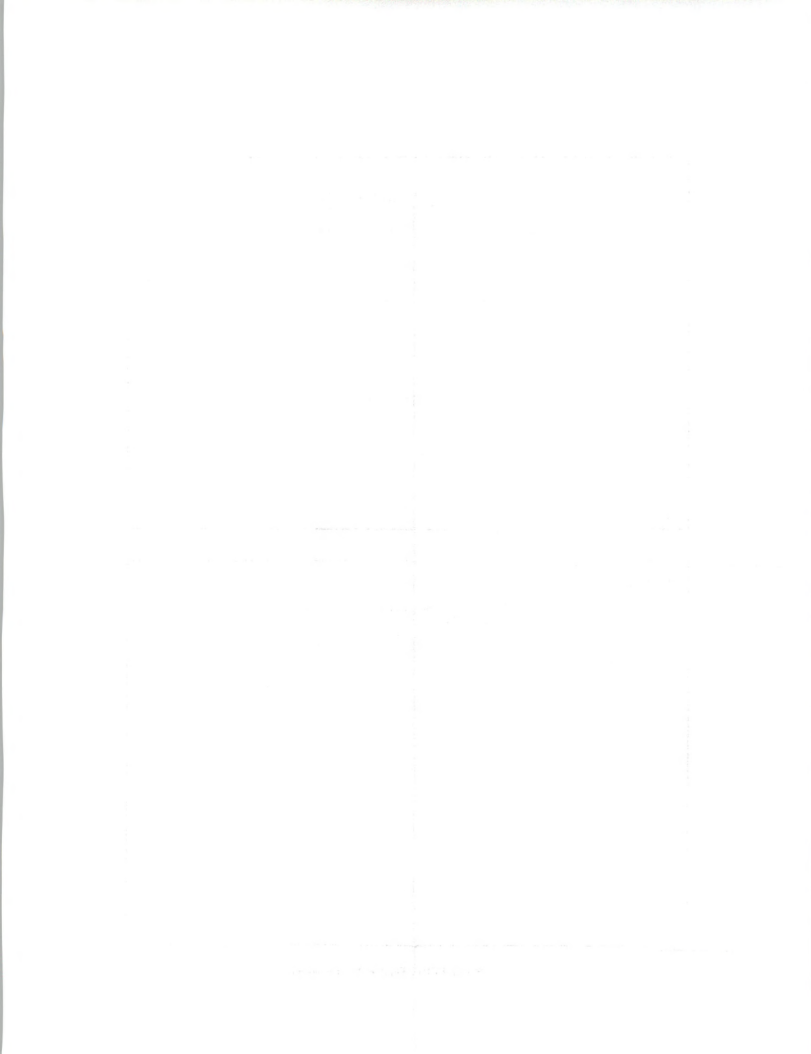
Changes in Application Software Services

1990-94: Focus within application

1995-99: Focus on interaction between applications

INPUT

Notes:

There is a reduction in demand for software package modification due to the plethora of parameter-driven packages available in the market. At the same time there is an increasing demand for services to allow interaction and flow of data among packages. In addition, the introduction of packed software into an environment populated with homegrown software generates further demand for information integration.

Satisfaction of this demand will become a focus of service attention over the next five years.

New Competition

- Computer companies ~ 40% of SI market
- Management consultancies
- Telecommunication vendors

INPUT

Notes:

All major computer manufacturers are in, or going into, the PS and SI markets. They are each claiming to have a solution focus. We estimate they currently have approximately 40% of the SI market.

Traditional management consultancies are moving into the SI business and extending their range of services thus often becoming direct competitors with the IT-related PS companies.

In areas such as telecommunications, the product vendors are moving into the services arena. This is bringing another meaning to "application services". No longer is the term used solely for computer based applications but now it must be associated with specific usage of IT and non-IT technology.

Makeup of PS Market

Chart — % of PS Business:

	1994	1999
Other Service-based Companies	5	10
PS Companies	50	35
Product-based Companies	45	55

Legend:
- □ Other Service-based Companies
- ■ PS Companies
- ▨ Product-based Companies
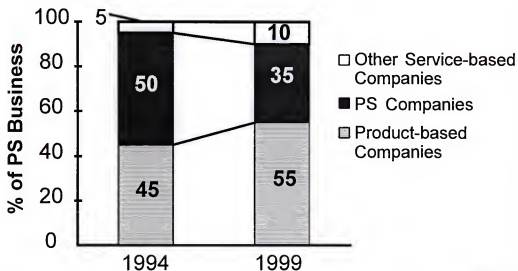
IMI-12

Notes:

The key message from this chart is the migration of services from the traditional PS vendors to other vendors in the market. For example, hardware and software vendors will continue to encroach upon the PS market and grab additional market share over the next few years.

Today's PS vendor who wants to expand must due so by seeking additional markets and/or increasing the range of services offered. PS vendors who look to expand on the basis of winning additional business from the same services will be squeezed.

7/94

Moving into Consultancy

Positive/Optimism ◄── Neutral ──► Negative/Caution

High Reward	High Risk
Competitive Advantage	Customer Perception
Customer Partnership	Increased Skill Req.

Vendor

INPUT

Notes:

The inclusion of Management Consultancy services can be a double-edged sword. The positive factors must be considered in conjunction with the negatives.

The high risk stems from the complexity of tasks and the change in skills, sales techniques, marketing etc. that are required. In addition, prospects may not perceive recent entrants into this market as viable vendors.

1994-1999 Service Market

1994

1999

INPUT

Notes:

In the 1994 services market there is overlap between PS, SI and Outsourcing. This picture will dramatically change by 1999 as the degree of overlap becomes extensive. Users will look more and more for their vendors to be capable of offering a complete range of services. The delivery capability need not always be present within one vendor but may be spread across several who then sell and deliver as one - a "virtual company".

This point regarding alliances will be discussed later in more detail.

Professional Services in 1999

1. Three catagories of vendor:
    - Independent full-service companies
    - Virtual companies
    - Niche-market specialists

2. Management consultancies are prime contractors

3. Development Service margins < 8%

INPUT

Notes:

Virtual companies = independent vendors working together as one.

The role of prime contractor will move from the integrator of today to the management consultant. This will be driven by the move to include BPR as starting point for change and the need to have overall control within the hands of the strategist.

This does not necessarily mean a new set of companies will assume prime responsibility but that today's SI vendor must include a management Consultancy service if they are retain prime status.

The availability of development services from a wide range of software, hardware and services companies (including independent consultants) will drive down the price and margins for this service area.

This erosion of margins started with hardware and is now hitting software. Development services will soon be affected. They are the next layer in a "solution hierarchy".

Peter: you may want to hand draw this "hierarchy" as it would be a good way to get audience participation.

Criteria for SI Vendor Selection

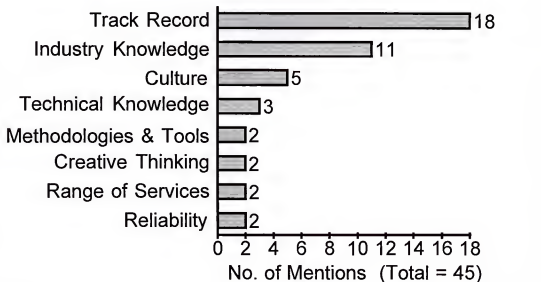| Selection Criteria	Importance*
Experience with similar systems	4.3
Proposal and discussions with vendors	4.2
Image of vendor as agent of change	4.1
Experience with industry and application	4.1
Pricing	4.1
Guarantees, penalties	4.1
Ability to work with functional users	4.0

*Rating: 1 = Low, 5 = High

IMI-16

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Notes:

These criteria came from the SI Market Forecast, 1993-1998 report.

Note that all the ratings shown are 4.0 or above.

7/94

Selection Criteria for BPR Vendors

Criteria	No. of Mentions
Track Record	18
Industry Knowledge	11
Culture	5
Technical Knowledge	3
Methodologies & Tools	2
Creative Thinking	2
Range of Services	2
Reliability	2

No. of Mentions (Total = 45)

IMI-17

Notes:

This data is from the report on BPR and SI relationship.

Note that Pricing is not mentioned.

"Creative Thinking" means the users wanted the BPR consultant to challenge them to consider new areas. Also expressed as "out-of-the-box" thinking.

This data indicates another reason for PS vendors to consider carefully before embarking on management consultancy services such as BPR. The market for these services is very different from the traditional IT PS market.

7/94

C/S Prime Vendor Considerations

- Server Equipment
  - Business issue* - Replacement cost
  - Technology issue - Capacity

- Server Operating System
  - Business issue* - Training cost
  - Technology issue - Multiprocessing capability

  * Indicates issue taking precedence in selection process

INPUT

Notes:

The next 3 charts are included as IMI are probably delivering products and services to users moving or considering moving to Client/Server systems. The notes show the expanded chart from 'Client/Server Explosion - How Users Choose Platforms' report.

C/S Component	Business Issues		Technology Issues
Server Equipment	*	Large installed base, expensive to replace, plus heavy investment in technical training etc.	Capability of existing equipment to handle growing number of applications
Server Operating System	*	Heavy investment in training for changeover to new OS, particularly to UNIX	Large DOS installed base does not have multiprocessing capability, could be solved by NT, UNIX or OS/2

(*) indicates issue taking precedence in selection process

7/94

C/S Prime Vendor Considerations

- Client Operating System
  - Business issue* - Investment in base
  - Technology issue - Capacity

- Network Operating System
  - Business issue* - Investment in base (Netware)
  - Technology issue - NT integration

  * Indicates issue taking precedence in selection process

INPUT

Notes:

C/S Component	Business Issues		Technology Issues
Client Equipment Operating System	*	Huge investment in installed PC base, Windows and associated user training	Potential capacity problems and current weakness in the DOS/Windows environments fault management
Network Operating System	*	Large installed base (NetWare), investment in training and technical support	NetWare considered state of the art but there are concerns about integration with NT

(*) indicates issue taking precedence in selection process

C/S Prime Vendor Considerations

- DB Management Software
    - Business issue - Cost of change
    - Technology issue* -Interface and portability

- Application Development Tools
    - Business issue - Investment and cost
    - Technology issue* - New tools

    * Indicates issue taking precedence in selection process

IMI-20

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Notes:

C/S Component	Business Issues		Technology Issues
DB Management Software	Significant investment to move to distributed relational, both training and licensing	*	Provides primary interface to applications and portability across multiple platforms
Application Development Tools	Costly to outfit designers with new tools, plus significant investment in current tools and training	*	Tools must match C/S applications architecture, critical to rapid development and re-engineering

(*) indicates issue taking precedence in selection process

Note that precedence has changed from Business Issues to Technology Issues

7/94

Influence of IT Decision Makers 1983-1998

Function	Level of Influence		
	1983	1993	1998
Individual User	Low	Medium	Medium
Functional Mid-Mgt.	Low	Medium	High
Funct. Exec.	Medium	High	High
IS Mid. Mgt.	High	Low	Low
CIO	High	Medium	Low
CEO/COO	High	High	High

IMI-21

INPUT

Notes:

Buying power is shifting away from the IT department and to the functional departments. the functional executives and senior corporate management are becoming key decision makers. This especially true in BPR environment where active participation by occupants of the executive suite is a prerequisite for success.

7/94

PS Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

Direction of PS Opportunity

INPUT

Notes:

Consider the spectrum of potential services. Traditionally, SI and PS have been focused on implementation of strategy but the move to management consulting is changing this role.

Primary opportunity for growth for the PS vendor is towards strategy-based services.

The shaded area shows the range of consulting services contained within the INPUT Business Integration program.

SI Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

Direction of SI Opportunity

IMI-23

INPUT

Notes:

SI vendors consider a broader spectrum of services than PS vendors. The increasing overlap of SI and Outsourcing demands that SI vendors consider Outsourcing as an extension to their services range and that Outsourcers consider the SI market.
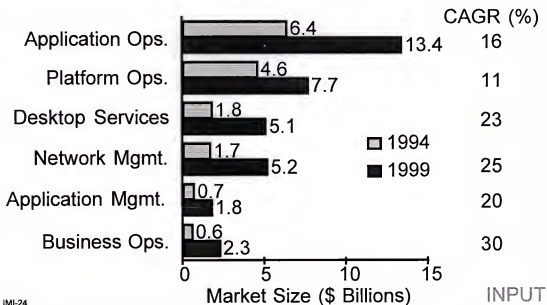
7/94

Outsourcing Market, 1994-1999

	Market Size ($ Billions)	CAGR (%)
Application Ops.	6.4 / 13.4	16
Platform Ops.	4.6 / 7.7	11
Desktop Services	1.8 / 5.1	23
Network Mgmt.	1.7 / 5.2	25
Application Mgmt.	0.7 / 1.8	20
Business Ops.	0.6 / 2.3	30

□ 1994
■ 1999

Market Size ($ Billions)
0   5   10   15

IMI-24

INPUT

Notes:

ISSC–Current

Strengths	Weaknesses
Data Center outsourcing	IBM bias
Size	Corporate confusion
Advantis alliance	Solution selling
Market awareness	Client/Server

Notes:

Most of ISSC's current contracts are either Platform or Application Operations

A key ISSC strength is infrastructure (facilities and, with Advantis, network) and a large number of data center operations personnel

Advantis is a key asset for bidding on mega contracts that require extensive network management capabilities

The IBM name still is marketable, especially for "IBM Shops"

The IBM bias is still an issue for some clients, especially in multivendor environments

IBM's constant reorganization is confusing. Who sells service? ISSC? The Trading Areas? Industry Solutions Group? Who delivers consulting? SI?

IBM is beginning a vertical sales/solution thrust for all IBM solutions under Denie Welsh's management. This group is projected to be merged into ISSC.

IBM has pockets of expertise in Client/Server but the market perception is that IBM/ISSC's strength is mainframes and not Client/Server

ISSC–Future (1998+)

Strengths	Weaknesses
IS solutions	Business process solutions
Technology	IBM bias
IT resources	Profitability
Market awareness	Sales strategy

Notes:

ISSC is moving towards IS solutions. The projected incorporation of the Industry Solutions group into ISSC will expand their capability in this area.

Technology will continue to be a strength of both IBM and by inferences, ISSC. Customer's will look to IBM for technological leadership.

Similarly, ISSC will have the people, facilities, products and services that support their technological leadership.

The IBM name will continue to be a key asset.

_____

ISSC will not participate directly in the Business Operations (Business Process Mgt) market

The perceived IBM bias will remain an obstacle to some prospects

The question of ISSC's profitability has already been asked by IBM management. As ISSC grows to include all aspects of service solutions, the importance of profitability will increase. ISSC's visibility to the investment community will increase as a key component to IBM's total financial performance and as such, it will receive increased scrutiny.

IBM tends to have a "sales strategy de jour". In the future, ISSC will have their own sales force. How they work with the other areas of IBM will continue to be an issue. Partnerships with other service providers will become more important and thiswill also cloud the sales picture.

ISSC Positioning

Business

Knowledge

Technology

IS Utility   Service   IS Solution

1998 Projected Position

1994 Marketing Message

1994 Actual Position

IMI-27

INPUT
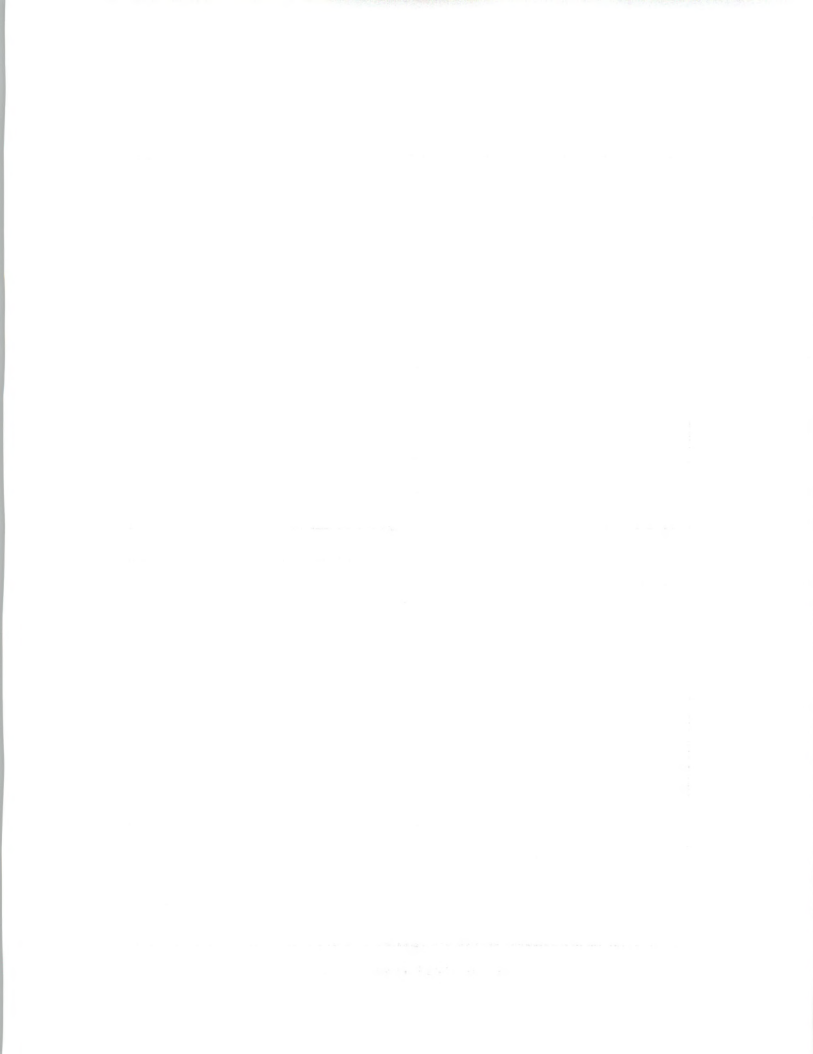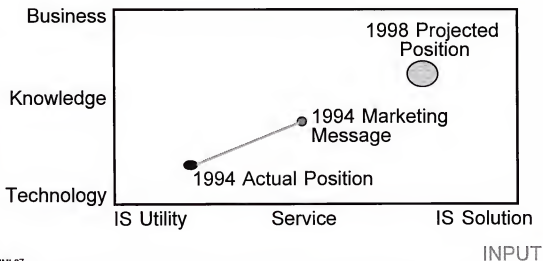
Notes:

ISSC is marketing themselves as IS solution vendors

Actually, most of their activity is in Platform and Application Operation outsourcing.

ISSC is including some SI and development activity, this will increase in the future, with the projected inclusion of their Industry Solutions Group

ISSC remains technology driven. In the future, there will be a more application orientation but business process management will never be a strength

7/94

Major Software Suppliers/Partners

Worldwide IS Revenues ($ M)

Supplier	1993	1992
Microsoft	4,100	3,300
Informix	350	280
HP	1,500	1,200
Sybase	430	270
Forté*		

Legend:
- ☐ 1993
- ■ 1992

*Emerging software supplier. Revenues not yet available

IMI-28

INPUT

Notes:

Background Data

Microsoft
making major thrust into enterprise and database markets,
strong developer program
provides visibility into future development environments and platforms

Informix
strong vertical market and value-added reseller program
heavy UNIX market presence

Hewlett-Packard
strong value-added reseller program
heavy emphasis on objects

Sybase
strong partnering program
IBM mainframe connectivity for a relational database vendor
Gain's Momentum development tool is strong for multimedia

Forté
revenues not yet available

emerging vendor of distributed development tool for screen creation and DBMS
interconnections across Mac, Windows and UNIX platforms
useful where users interact with each other in real time

7/94

IMI Fit With Partner Strengths

	IMI Benefit	Partner
Microsoft	Future platforms	Databases, tools
Informix	Vertical leads	VAR program
HP	Object platforms	Large accounts
Sybase	Mainframe access	VAR program
Forté	Rapid deployment	Technology

INPUT

Notes:

Microsoft provides a new platform opporunity as it targets major corporations with databases. Also it provides pre-release software for new platforms and excellent developer support.

Informix can provide vertical market leads and open systems expertise.

HP provides hardware, but more importantly a range of object-oriented platforms such as Taligent and OpenStep.

Sybase is moving into lower-end databases as well as having strong interfaces to legacy data. Sybase has a strong program for partners.

Forte is an emerging vendor that has distributed software development tools. These are worth considering for new applications development. It provides IMI with advanced technology and supplements Powersoft's product for lower end systems.

Strategic Alliances

SI Vendors +
Manufacturers +
Consultancies

Niche Market
Service Vendors

IMI

Complementary
Service Vendors

Product
Vendors

Today's alliances

IMI-30

INPUT

Notes:

IMI have traditionally considered strategic alliances from the standpoint of product. While this view is important, and discussed in following slides, is a mistake to ignore other types of strategic alliances and partnerships.

4 dimensions of alliance:

1. SI vendors/manufacturers/large consultancies - this provides IMI with a route for software sales as well as access to corporate accounts "owned" by these other vendors.

2. Complementary Service Vendors - relationships with vendors offering different services yet to customers similar to IMI's. This will provide viable competition to full-service providers such as Andersen/CSC/ISSC/Unisys etc. These partnerships can be seen as "virtual companies" that leverage off each others activities.

3. Niche Market Service Vendors - providing a source of specialist skills when required

4. Product Vendors - this has been the focus of IMI attention to date. Following slides review this topic.

Selecting Partners

- Technology suppliers
  - Hardware manufacturers
  - Software vendors
  - System integrators
- Corporate investors
- Prime contractors
- Major accounts

IMI-31

Notes:

IMI needs to find other partners besides technology partners

It needs financial and marketing strength to complement its services

It must encourage partners to commit not just resources but invest in people that support IMI.

IMI needs to create a positioning statement that explains why it can attract these partners. It could be based on IMI's expertise in managing technical teams and having applications expertise.
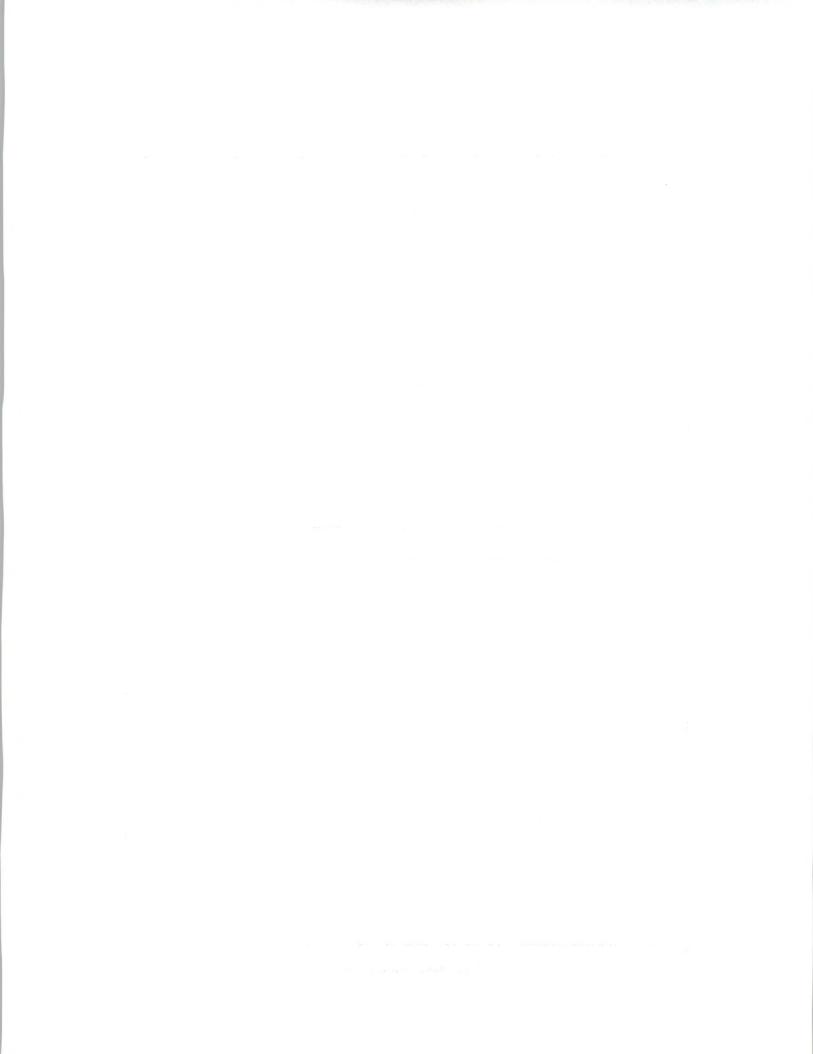
7/94

Selection Criteria

- World class reputation
- Financial and marketing muscle
- Non-competitive
- IMI is critical to partner's success
- Partner's senior management supports IMI

IMI-32

Notes:

World class reputation - technology or market leader that can bring IMI to new customers.

Financial and marketing - both must be present.
Example: IBM partners who went with OS/2 initially. IBM had financial investments in some companies, but the marketing installed base was not there to make a successful business.

Non-competitive - Compaq is currently working out how it can sell to major accounts directly without impacting dealers. Traditionally Compaq has been very focused and not competed with its resellers. Powersoft is leveraging its distribution and is not competing with its resellers - a reason to continue to support Powersoft.

Partner needs to depend on IMI - it is easy for a major corporation or software supplier to view IMI as one of many resellers. It is essential that IMI finds partners who without IMI will see considerable business loss.

Issues

- Territory
- Offshore development
- Focus
- Software assets
- Leverage

Notes:

Territory

- How can IMI support large multinationals?
- Will partners sell into select markets?
  - Geographical, verticals, applications
- How does IMI intend to grow internationally?
- Should IMI focus on a local region?

INPUT

Notes:

Sequent resells its hardware to Unisys. As Sequent sells more to users it becomes less dependent on Unisys. Also Unisys has alternative hardware sources. However there are some countries that Sequent cannot reach and for these countries Unisys can gain additional business reselling Sequent machines. Large customers may want overseas support for their systems. Can IMI provide this? Are there additional partners that IMI can work with to provide multinationals with the support that they need?

Resellers of software are often regionally focused. IMI needs to be differentiated in the territories it selects and find complementary partners in other markets from which it can get referrals.

Another way to differentiate the business is to become a leader in vertical markets such as telecommunications. Since this is a large market (client/server software designed for telecommunications and cable companies is estimated to reach $4B by 1998) there is opportunity for product platforms that can be readily customized.

Which towns (or Edge Cities) is IMI really focused on - examples Route 287 NJ - AT&T, BellCore or in California Pleasanton/San Ramon.

Off-shore Development

- Lower costs
- Ability to balance slack better
- Appropriate for straightforward code
- Rapidly growing opportunities

INPUT

Notes:

Does IMI have any Indian or Israeli or Irish developers?

INPUT recently worked with an offshore developer. This company puts 20% of its effort into customer site support the remaining 80% of development offshore, using tools like Powersoft. It is looking for partners that can use its development services. Is IMI interested in such relationships?

Why program offshore? When times are slack it is less expensive to keep programmers on the payroll overseas than in the US. These times can be used to develop standard products and learn new tools.

What should be programmed offshore? Relatively straightforward projects.

Where are the offshore opportunities? India, Israel, Ireland, Russia

What are the issues? Management, language, payment (may need to barter).

Focus

- What are IMI's core competencies?
- Can some functions be done better by partners?
- Which areas are best for large companies?
- Where can IMI specialize?

INPUT

Notes:

IMI has many different activities - management consulting, programming services, systems design expertise. What are the real core competencies?

Can partners undertake some of the business? For management consulting would IMI be better partnering with a consulting firm and concentrating on technical issues?

The telephone billing area is suitable for both large and small companies, providing the right area is selected. How does IMI work or compete with Keane, CBIS, GTE, Bellcore, AT&T Bell Labs?

How is the market changing?

IMI's Software Assets

- How does IMI manage software assets?
- Competitive advantage
  - Time to market
  - Rapid application development
  - Fewer errors, enhanced reliability
- Application frameworks
- Licensing opportunities

INPUT

Notes:

Managing software assets - how is the software protected - patent, trade secret or copyright?

Powersoft is a good fit for IMI it gives it rapid application development, fast time to market. However this is a minimum. How does IMI manage code re-use, software assets, version control and team development to ensure that its code can be leveraged into other clients?

Does IMI have a competitive edge that enables it to sell products it creates using Powersoft? These may be simple utilities. If IMI does not sell such code should it license it to someone who can sell it?

Examples - Covia Technologies - sells middleware software for transaction processing - spun out of the airline reservation system business as a separate company.

DataEase a database vendor - sold enterprise client/server software tools to Symantec.

Leverage Applications

Billing System

| Electronic Catalogs | Internet Services | Wireless Services |
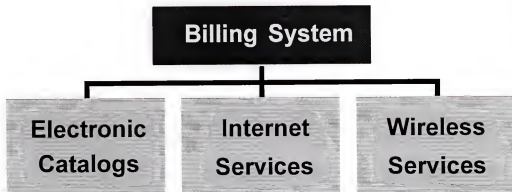
INPUT

Notes:

IMI can leverage its application expertise. Take billing systems as an example. New services are demanding new kinds of billing systems (Visa cannot do it all!). Even if Visa and Mastercard process bills the service provider still has to send information to them and get its own records. Niche the market and expand into emerging but related areas that need billing systems.

Expertise in billing systems can be applied to emerging markets

Electronic catalogs - many retailers will require interfaces to their billing systems

Internet services - content providers on the internet require billing

Wireless services - local and wide-area service

IMI needs to select one or two new markets where it can partner with suppliers and use its billing system expertise in emerging applications.

Leverage Customers

Billing System

| Authentication Module | Market Analysis Module | Direct Mail Module |
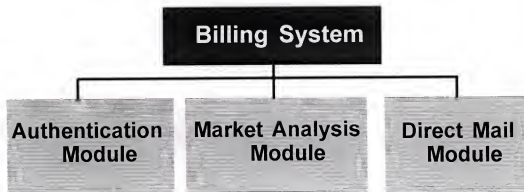
INPUT

Notes:

Adding new customers is expensive - IMI can sell more to its existing customers.

Retaining customers lowers the cost of sales

Consider other modules that can be added to existing installations

Security is a key concern

What IMI Needs From Partners

	IMI	Partners
Direct sales	Small direct force	Large direct force
Marketing	Public relations	Co-op marketing
Tech support	Clients via E-mail	For major users
Training	Franchise	Train users
Expertise	Applications	Major accounts
Contracting	Usually sub	Usually prime

INPUT

Notes:

IMI needs to draw up a similar chart to this for each of its partners to understand if the fit is good.

Ask All Partners For ...

- Leads and referrals
- Joint sales calls
- Co-op advertising
- Use of brand name
- Trade show space
- Opportunity to speak to user groups

IMI-41

Notes:

Too often companies do not push their partners hard enough. IMI needs to ask partners for more commitment, more resources. Above are some of the ways in which IMI can expand its sales and marketing efforts at little cost to itself.
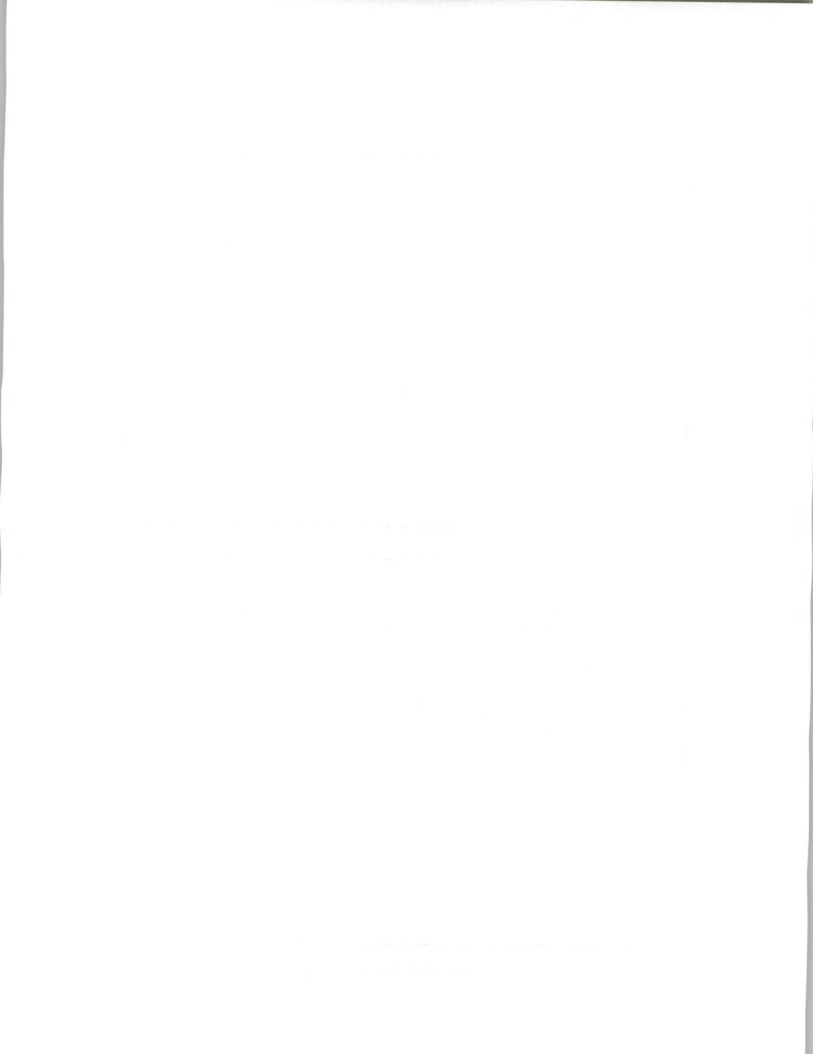
7/94

Ask Hardware Vendors For ...

- Porting fee
- Loaner machines
- Lead referral bonus
  - For supplying hardware sales leads

INPUT

Notes:

Hardware vendors typically support software developers better than value-added resellers with advanced technology. If a hardware manufacturer releases a new machine a software company will typically ask for a porting fee to complete the port, the larger the company the more it can ask. VARs and system integrators need to ask hardware manufacturers to support their software development efforts more, so that the VAR is not late to market.

IMI can refer leads to hardware manufacturers for a fee. These deals may be worked out with local sales offices. Local sales offices of hardware manufacturers are also a good source of leads for IMI. Joint sales calls may be worked out locally, then a national agreement may be sought.
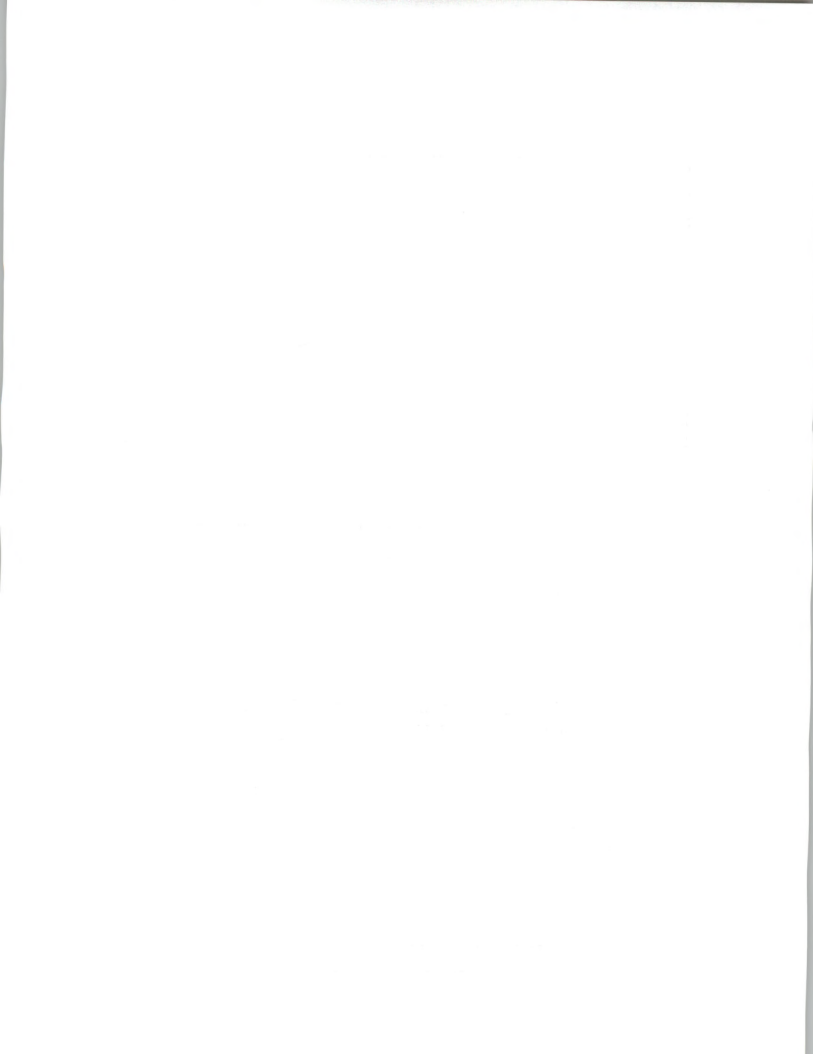
Ask Software Partners For ...

- Developer support
  - Microsoft Devcon
- Early software releases
- Access to latest bug fixes
- Programmer training

INPUT

Notes:

Microsoft has one of the best developer programs - but it starts to cost. The Devcon is a satellite transmission of future information. Microsoft's CD-ROMs are invaluable for technical information from these events. Also developers can use online forums like Compuserve to get support.

IMI can benefit from early software releases as it helps get the product to market early and ensures that software has a modern look and feel. The risks are unproven code which can delay development. IMI has to decide which code it is worth testing early (such as Windows 4.0 Chicago) vs. which it is better waiting for until it is released and seeing if the market takes off (Taligent - joint IBM-Apple development with object frameworks).

Does IMI connect into software developer's bug reporting systems electronically? To what extent will the software vendor support electronic connections. Does the software vendor email bug fixes automatically to IMI?

Programmer training - does the software vendor give IMI breaks on its training prices?
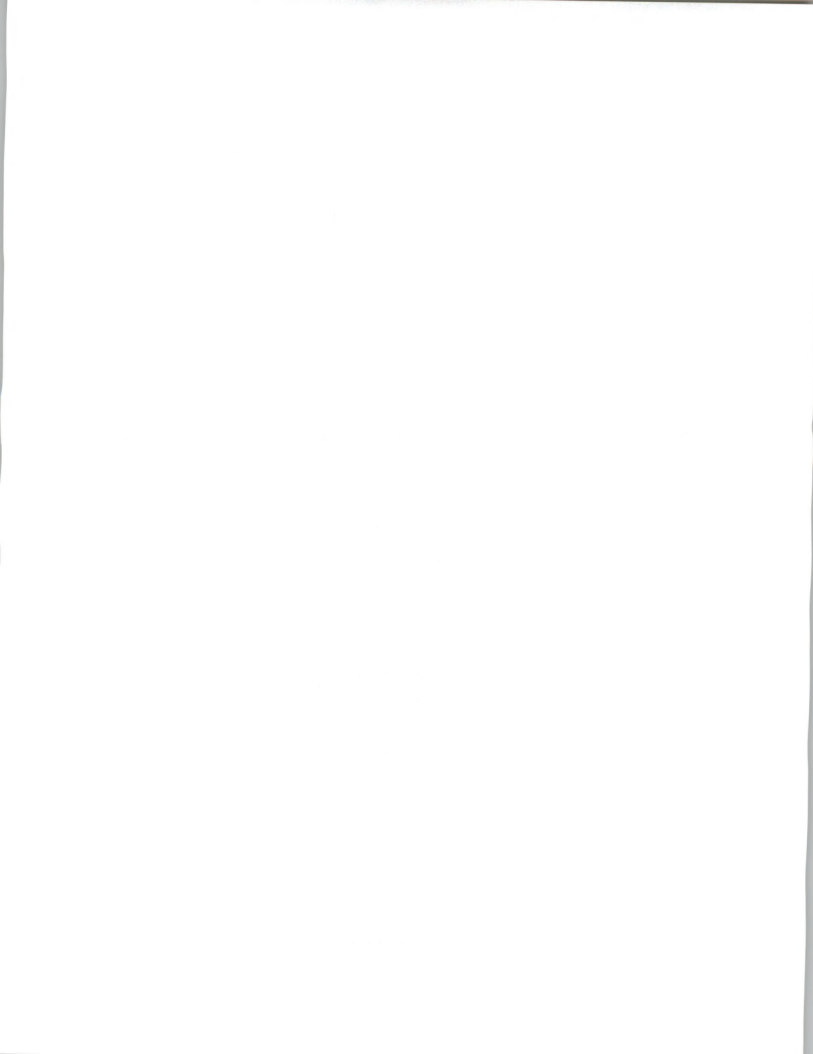
Is Powersoft a Good Partner?

	IMI	Powersoft
Direct sales	Sells direct	Wants resellers
Marketing	Low visibility	High visibility
Tech support	For application	First rate
Training	Opportunity	Supports trainers
Expertise	Applications	Packaged tools
Contracting	Yes	No

Notes:

This is an excellent opportunity for IMI. However there are many other Powersoft resellers so IMI must further differentiate its expertise.

Powersoft provides excellent support for its training companies and has over 60 of them. Powersoft prefers to train the trainers rather than support a large in-house staff. In contrast Knowledgeware has 90 staff involved in training and consulting and make $12M. If IMI is not a Powersoft training partner it may represent a further opportunity.

Presentation Agenda

- Information Services Market

- Professional Services/SI:
  Near and Long-Term Assessment

- Prime Vendor Selection Criteria

- User Buying Patterns

- Outsourcing/ISSC Assessment

- "New Technology" Software Company
  Opportunities

IMI-1

INPUT

U.S. Information Services Industry, 1994-1999

Market Size ($ Billions)

300
250
200
150
100
50
0

152 (1994)

271 (1999)

1994   CAGR 12%   1999

IMI-2

INPUT

Hot Industries in 1999

Industry	1999		IMI Expertise
	Size ($ B)	Ranking	
Discrete mfg.	32.6	1	X
Banking/finance	28.3	2	X
Federal gov't.	16.8	3	
Process mfg.	16.4	4	X
State/local gov't.	15.2	5	X
Telecommunications	11.2	6	X

IMI-3

INPUT

Top Five-Year Growth Rates 1994-1999

Industry	1994-1999		IMI Expertise
	CAGR (%)	Ranking	
Telecommunications	19	1	X
Retail distribution	16	2	
Process mfg.	15	3	X
Discrete mfg.	15	3	X
State and local gov't.	14	5	X

IMI-4

INPUT

IMI Market Size, 1994-1999
Professional Services

Industry	1994 ($ M)	1999 ($ M)
Banking	2,885	4,333
Discrete Mfg.	5,580	7,869
Process Mfg.	2,936	5,856
State and Local	2,324	5,572
Telecomm.	1,519	4,021
Overall Market	22,090	37,994

IMI-5

INPUT

IMI Market Size, 1994-1999
Systems Integration

Industry	1994 ($ M)	1999 ($ M)
Banking	689	1,786
Discrete Mfg.	1,948	4,977
Process Mfg.	505	1,019
State and Local	1,161	2,047
Telecomm.	364	1,086
Overall Market	11,184	22,673

IMI-6

INPUT

IMI Market Growth, 1994-1999

Industry	PS (%)	SI (%)
Banking	8	21
Discrete Mfg.	7	21
Process Mfg.	15	15
State and Local	19	12
Telecomm.	21	24
Overall Market	11	15

IMI-7

INPUT

Service Market Opportunity

Service	Market Size	Est. Market Growth (%)
Management Consultancy	Small	+20
Project Services	Medium	10-15
Staff Augmentation	Large	5-10

IMI-8

INPUT

Current PS Environment

- Increase in management consultancy
- Increased technical complexity
- Re-positioning of companies
- Move to SI to maintain margins

INPUT

Changes in Application Software Services

1990-94: Focus within application

$\downarrow$

1995-99: Focus on interaction between applications

IMI-10

INPUT

New Competition

- Computer companies ~ 40% of SI market
- Management consultancies
- Telecommunication vendors

Makeup of PS Market

% of PS Business

	1994	1999
☐ Other Service-based Companies	5	10
■ PS Companies	50	35
▨ Product-based Companies	45	55

IMI-12

INPUT

Moving into Consultancy

Positive/Optimism ◄— **Neutral** —► **Negative/Caution**

High Reward | High Risk

Competitive Advantage | Customer Perception

Customer Partnership | Increased Skill Req.

Vendor

IMI-13

INPUT

1994-1999 Service Market

1994 diagram: PS, Outsourcing, SI (overlapping circles) — **1994**

1999 diagram: Outsourcing, SI, PS (overlapping circles) — **1999**

IMI-14

INPUT

Professional Services in 1999

1. Three catagories of vendor:
   - Independent full-service companies
   - Virtual companies
   - Niche-market specialists

2. Management consultancies are prime contractors

3. Development Service margins < 8%

INPUT

Criteria for SI Vendor Selection

Selection Criteria	Importance*
Experience with similar systems	4.3
Proposal and discussions with vendors	4.2
Image of vendor as agent of change	4.1
Experience with industry and application	4.1
Pricing	4.1
Guarantees, penalties	4.1
Ability to work with functional users	4.0

*Rating: 1 = Low, 5 = High

IMI-16

INPUT

Selection Criteria for BPR Vendors

Criteria	No. of Mentions
Track Record	18
Industry Knowledge	11
Culture	5
Technical Knowledge	3
Methodologies & Tools	2
Creative Thinking	2
Range of Services	2
Reliability	2

No. of Mentions (Total = 45)

IMI-17

INPUT

C/S Prime Vendor Considerations

- Server Equipment
  - Business issue* - Replacement cost
  - Technology issue - Capacity

- Server Operating System
  - Business issue* - Training cost
  - Technology issue - Multiprocessing capability

  * Indicates issue taking precedence in selection process

IMI-18

INPUT

C/S Prime Vendor Considerations

- Client Operating System
  - Business issue* - Investment in base
  - Technology issue - Capacity

- Network Operating System
  - Business issue* - Investment in base (Netware)
  - Technology issue - NT integration

  * Indicates issue taking precedence in selection process

IMI-19

INPUT

C/S Prime Vendor Considerations

- DB Management Software

  - Business issue - Cost of change

  - Technology issue* -Interface and portability

- Application Development Tools

  - Business issue - Investment and cost

  - Technology issue* - New tools

  * Indicates issue taking precedence in selection process

IMI-20

INPUT

Influence of IT Decision Makers 1983-1998

Function	Level of Influence		
	1983	1993	1998
Individual User	Low	Medium	Medium
Functional Mid-Mgt.	Low	Medium	High
Funct. Exec.	Medium	High	High
IS Mid. Mgt.	High	Low	Low
CIO	High	Medium	Low
CEO/COO	High	High	High

IMI-21

INPUT

PS Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

← Direction of PS Opportunity

IMI-22

INPUT

SI Services Range

Corporate Strategy	IT Operating Strategy	Technology Strategy	Systems Integration + Professional Services	Outsourcing

IT Mgt. Consulting

← Direction of SI Opportunity →

INPUT

Outsourcing Service Categories

- Outsourcing
  - IS Outsourcing
    - Sys. Ops.
      - Platform Operations
      - Application Operations
    - Desktop
    - Net. Mgmt.
    - Appl. Mgmt.
  - Bus. Oper. Outsourcing

SK-1

INPUT

Outsourcing Market, 1994-1999

Category	1994	1999	CAGR (%)
Application Ops.	6.4	13.4	16
Platform Ops.	4.6	7.7	11
Desktop Services	1.8	5.1	23
Network Mgmt.	1.7	5.2	25
Application Mgmt.	0.7	1.8	20
Business Ops.	0.6	2.3	30

Market Size ($ Billions)

IMI-24

INPUT

ISSC–Current

Strengths	Weaknesses
Data Center outsourcing	IBM bias
Size	Corporate confusion
Advantis alliance	Solution selling
Market awareness	Client/Server

IMI-25

INPUT

ISSC–Future (1998+)

Strengths	Weaknesses
IS solutions	Business process solutions
Technology	IBM bias
IT resources	Profitability
Market awareness	Sales strategy

IMI-26

INPUT

ISSC Positioning

Business			1998 Projected Position
Knowledge		1994 Marketing Message	
Technology	1994 Actual Position		
	IS Utility	Service	IS Solution

IMI-27

INPUT

Major Software Suppliers/Partners

Microsoft — 4,100 (1993) / 3,300 (1992)
Informix — 350 (1993) / 280 (1992)
HP — 1,500 (1993) / 1,200 (1992)
Sybase — 430 (1993) / 270 (1992)
Forté*

□ 1993
■ 1992

Worldwide IS Revenues ($ M)
0 1000 2000 3000 4000 5000

*Emerging software supplier. Revenues not yet available

IMI-28

INPUT

IMI Fit With Partner Strengths

	IMI Benefit	Partner
Microsoft	Future platforms	Databases, tools
Informix	Vertical leads	VAR program
HP	Object platforms	Large accounts
Sybase	Mainframe access	VAR program
Forté	Rapid deployment	Technology

IMI-29

INPUT

OPTIONAL SEC. PART

Strategic Alliances

SI Vendors +
Manufacturers +
Consultancies

Niche Market
Service Vendors

IMI

Complementary
Service Vendors

Product
Vendors

Today's alliances

IMI-30

INPUT

Selecting Partners

- Technology suppliers
  - Hardware manufacturers
  - Software vendors
  - System integrators
- Corporate investors
- Prime contractors
- Major accounts

IMI-31

INPUT

Selection Criteria

- World class reputation
- Financial and marketing muscle
- Non-competitive
- IMI is critical to partner's success
- Partner's senior management supports IMI

IMI-32

INPUT

Issues

- Territory
- Offshore development
- Focus
- Software assets
- Leverage

INPUT

Territory

- How can IMI support large multinationals?
- Will partners sell into select markets?
  - Geographical, verticals, applications
- How does IMI intend to grow internationally?
- Should IMI focus on a local region?

INPUT

Off-shore Development

- Lower costs
- Ability to balance slack better
- Appropriate for straightforward code
- Rapidly growing opportunities

IMI-35

INPUT

Focus

- What are IMI's core competencies?
- Can some functions be done better by partners?
- Which areas are best for large companies?
- Where can IMI specialize?

IMI-36

INPUT

IMI's Software Assets

- How does IMI manage software assets?
- Competitive advantage
  - Time to market
  - Rapid application development
  - Fewer errors, enhanced reliability
- Application frameworks
- Licensing opportunities

IMI-37

INPUT

Leverage Applications

Billing System

Electronic Catalogs | Internet Services | Wireless Services

IMI-38

INPUT

Leverage Customers

Billing System

Authentication Module | **Market Analysis Module** | **Direct Mail Module**

IMI-39

INPUT

What IMI Needs From Partners

	IMI	Partners
Direct sales	Small direct force	Large direct force
Marketing	Public relations	Co-op marketing
Tech support	Clients via E-mail	For major users
Training	Franchise	Train users
Expertise	Applications	Major accounts
Contracting	Usually sub	Usually prime

IMI-40

INPUT

Ask All Partners For ...

- Leads and referrals
- Joint sales calls
- Co-op advertising
- Use of brand name
- Trade show space
- Opportunity to speak to user groups

IMI-41

INPUT

Ask Hardware Vendors For ...

- Porting fee
- Loaner machines
- Lead referral bonus
  - For supplying hardware sales leads

IMI-42

INPUT

Ask Software Partners For ...

- Developer support
  - Microsoft Devcon
- Early software releases
- Access to latest bug fixes
- Programmer training

IMI-43

INPUT

Is Powersoft a Good Partner?

	IMI	Powersoft
Direct sales	Sells direct	Wants resellers
Marketing	Low visibility	High visibility
Tech support	For application	First rate
Training	Opportunity	Supports trainers
Expertise	Applications	Packaged tools
Contracting	Yes	No

IMI-44

INPUT